CLAIMS:

1. A method for isolating viable epithelial cells in a solution, the method comprising:

providing an antibody or antigen-binding portion thereof which binds to an extracellular domain of prostate specific membrane antigen (PSMA);

contacting a solution containing said epithelial cells with said antibody or antigen-binding portion thereof under conditions permitting binding of said antibody or antigen-binding portion thereof to said epithelial cells, to form a complex including said antibody or antigen-binding portion thereof, and said epithelial cells; and

isolating said cells by virtue of binding to the antibody or antigen-binding portion thereof.

2. The method of Claim 1, wherein said antibody or antigen-binding portion thereof is selected from the group consisting of a monoclonal antibody, a polyclonal antibody, an F(ab), an $F(ab')_2$, and an F_v.

3. The method of Claim 1, wherein said antibody or antigen-binding portion thereof is a monoclonal antibody.

4. The method of Claim 3, wherein said monoclonal antibody is selected from the group consisting of an E99, a J415, a J533, and a J591 monoclonal antibody.

5. The method of Claim 4, wherein said monoclonal antibody is a J591 monoclonal antibody.

6. The method of Claim 3, wherein said monoclonal antibody is produced by a hybridoma cell line having an ATCC Accession Number selected from the group consisting of HB-12101, HB-12109, HB-12127, and HB-12126.

7. The method of Claim 1, wherein said epithelial cells are selected from the group consisting of normal epithelial cells, benign hyperplastic epithelial cells, and cancerous epithelial cells.

8. The method of claim 7, wherein said epithelial cells are cancerous epithelial cells.

9. The method of claim 7, wherein said cancerous epithelial cells are cancerous prostate epithelial cells.

10. The method of Claim 1, wherein said epithelial cells are exfoliated prostate epithelial cells.

11. The method of Claim 10, wherein said exfoliated prostate epithelial cells are selected from the group consisting of normal prostate epithelial cells, benign hyperplastic prostate epithelial cells, and cancerous prostate epithelial cells.

12. The method of Claim 11, wherein said exfoliated prostate epithelial cells are cancerous prostate epithelial cells.

13. The method of Claim 12, wherein said cancerous prostate epithelial cells are prostatic adenocarcinoma cells.

14. The method of Claim 1, wherein said solution includes a biological fluid.

15. The method of Claim 14, wherein said biological fluid is selected from the group consisting of blood, urine, semen, seminal fluid, lymph, cerebrospinal fluid, mucus, tears, sweat, gastric fluid, saliva, synovial fluid, and a bone marrow suspension.

16. The method of Claim 15, wherein said biological fluid is semen.

17. The method of claim 14, wherein the biological fluid is obtained from a patient.

18. The method of claim 17, wherein one or more additional samples of the fluid is obtained from the patient.

19. The method of claim 17, wherein the method of isolating viable epithelial cells is repeated on one or more of the additional samples.

20. The method of claim 18, wherein one or more of the additional samples is obtained from the patient during therapy.

21. The method of claim 17, wherein the patient has undergone a biopsy.

22. The method of claim 21, wherein the biopsy is negative.

23. The method of claim 22, wherein there is a high index of suspicion of cancer.

24. The method of Claim 1, wherein said solution comprises a tissue culture medium.

25. A method for isolating viable vascular endothelial cells in a solution, the method comprising:

providing an antibody or antigen-binding portion thereof which binds to an extracellular domain of prostate specific membrane antigen (PSMA);

contacting a solution containing said endothelial cells with said antibody or antigen-binding portion thereof under conditions permitting binding of said antibody or antigen-binding portion thereof to said endothelial cells, to form a complex including said antibody or antigen-binding portion thereof, and said endothelial cells; and

isolating said endothelial cells by virtue of binding to the antibody or antigen-binding portion thereof.

26. The method of claim 25, wherein said vascular endothelial cells are from a cancerous tissue selected from the group consisting of cancerous renal tissue, urothelial tissue, colon tissue, rectal tissue, lung tissue, and breast cancerous tissue and cancerous tissue of metastatic adenocarcinoma to the liver.